UNITED STATES PATENT AND TRADEMARK OFFICE

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 08 May 2008.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5-9,12-14,18,19 and 27-32* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-9,12-14,18,19 and 27-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12/29/03* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

DETAILED ACTION

1.   Claims 1-2, 5-9, 12-14, 18-19 and 27-32 are pending in the application.

Response to Arguments

2.   Applicant's arguments filed 05/08/08 have been fully considered but they are not persuasive. Applicant argues in REMARK, page 10 that "Chen does not describe each <u>second location</u> in the <u>second switching device</u> is configured to receive packets from one or more <u>first locations</u> and other <u>second locations</u>, as claimed."

Examiner respectfully disagrees because Chen indeed teaches arguable features and all the claimed limitations recited in the claim.

According the at least FIG. 2 & 3, Chen discloses receiving a plurality of packets at a plurality of first locations **(receiving packets at First high-speed network port 56)** in a first switching device **(First network switch chip 52)** operatively coupled to a second switching device **(Second network switch chip 54)**, the first switching device **(First network switch chip 52)** to transmit the plurality of packets to a plurality of second locations **(packets transmit to Second high-speed network port 57)** in the second switching device **(Second network switch chip 54)**, each second location **(Second high-speed network port 57)** configured to receive packets from one or more first locations **(First high-speed network port 57)** and other second locations **(Second forwarding control unit 71 or second connection port control unit 69 coupled to second connection port 68)**.

Applicant further argues on page 11 that "Chen does not describe or suggest that a first connection port can receive data from other first connection ports or that a second connection port can receive data from other second connection ports. Such limitation is not in the claim..

Respond to argument on page 12 (claims 28 and 29). Chen further discloses wherein a packet for packet transmission to a destination second location is queued at a sending first location **(Figure 3 shown packets to be transmitted from First network switch chip (52) to a destination second location in second network switch chip 54 is queued in a sending first location (First queue control unit 63 and First buffer control unit 62).**

Examiner believes Chen discloses and render obvious to all the rejected claims. Therefore, the rejection stands.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-2, 5, 7-9, 12, 14, 18-19, 27-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al (US 2004/0174890 A1).

Regarding claims 1, 2, 5, 7-9, 12, 14, 18-19, Chen discloses a system and method comprising **(see FIG. 1 & 3):**

receiving a plurality of packets at a plurality of first locations **(receiving packets at First high-speed network port 56)** in a first switching device **(First network switch chip 52)** operatively coupled to a second switching device **(Second network switch chip 54)**, the first switching device **(First network switch chip 52)** to transmit the plurality of packets to a plurality of second locations **(packets transmit to Second high-speed network port 57)** in the second switching device **(Second network switch chip 54)**, each second location **(Second high-speed network port 57)** configured to receive packets from one or more first locations **(First high-speed network port 57)** and other second locations **(Second forwarding control unit 71 or second connection port control unit 69 coupled to second connection port 68);**

receiving a message for regulating packet flow on the first switching device from the second switching device, the message identifying a congested second location in the second switching device; and

slowing packet transmission from the first switching device to the second switching device in response to receiving the message.

Chen discloses "The first network chip 12 and the second network switch chip 14 can share the congestion condition through the connection "f the first high-speed network port 16 and the second high-speed network port 18. For example, once a connection port (in the first connection ports 15 or the second connection ports 17) congests, the first switch chip 12 or the second network

switch chip 14 stops the data transmission from the source port toward the congested port, in other words the first network switch chip 12 and the second network switch chip 14 can send a command or a control packet to stop data transmission to the congested port unit the congestion is relieved." [0014].

Regarding claims 28, 31, Chen discloses wherein a packet for packet transmission to a destination second location is queued at a sending first location (Figure 3 shown packets to be transmitted from First network switch chip (52) to a destination second location in second network switch chip 54 is queued in a sending first location (First queue control unit 63 and First buffer control unit 62).

Regarding claims 29 and 32, Chen further discloses in response to receiving the message slowing transmission of the packet from the first location, upon determining that the destination second location is the congested second location.

Chen further teaches "In case that one or more port is congested, the network switch chip 30 stops the data coming from external stations or switches." [0017] "When the congestion occurs, the network switch chip 30 determines a flow control approach according to the operation mode and the flow control ability of the station connected to the physical layer 37. The flow control approaches include the full duplex flow control; drop control and backpressure control. When the stations or switches connected to the physical-layer devices

37 (source ports) have full duplex ability, the network switch chip 30 performs flow control." [0017], [0018].

Claim Rejections - 35 USC § 103

5.　　The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.　　Claims 6, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US 2004/0174890 A1) in view of Joung et al (US 6,628,613 B1).

Regarding claims 6 and 13, Chen does not disclose transmitting the message from the second switching device to a third switching device.

Joung, in the same field of endeavor, teaches this limitation (see figure 1, Col. 3, line 9-20).

It would have been obvious to those having ordinary skill in the art at the time of the invention was made to implement the step of transmitting the congestion control message from the second switching device to the other switching devices to alert an existing traffic congestion of the switch.

7.   The prior art made of record and not relied upon is considered pertinent to

Applicant's disclosure.

Ni (US 6,680,910) discloses an integrated circuit includes the capability, either

alone or in combination with other integrated circuits, to monitor the receive rate

utilization of a network interface unit and adjust the minimum interval for the

transmission of a flow control frame, based at least one part, on the receive rate

utilization determined.

DeLong (US 6,141,344) a coherence mechanism for distributed address caches

in a network switch.

Calvignac et al (US 2003/0110339 A1) discloses a chip to chip interface for

interconnecting chips.

Conclusion

8.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action.   In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action.   In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild, can be reached on (571) 272-2092.

        Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

June 15, 2008

/Brenda Pham/

Primary Examiner, Art Unit 2616